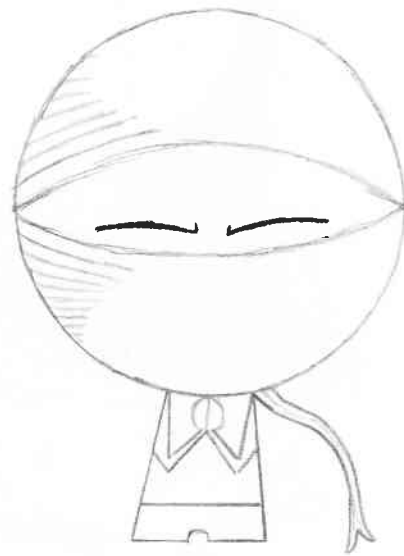
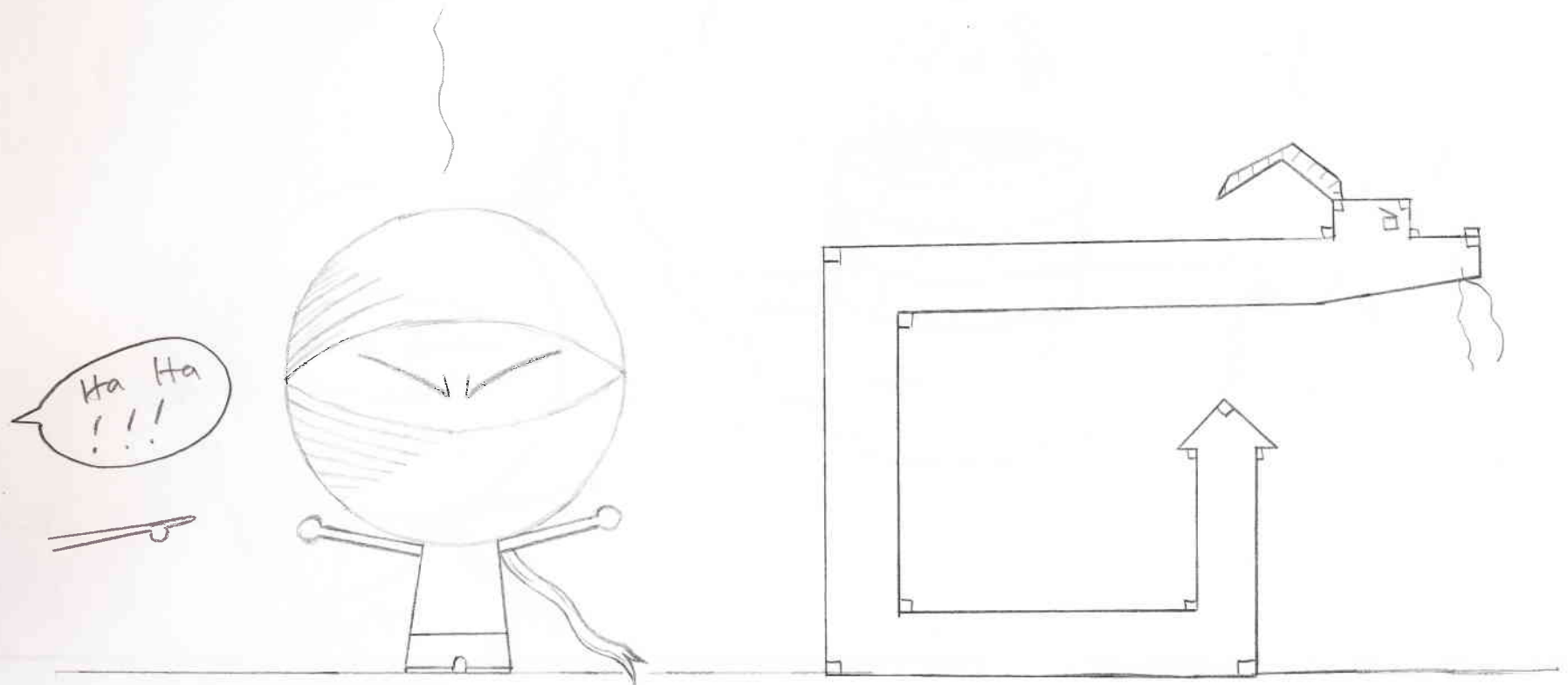


Ninja and the Quest for the Lost Well of Circumference

By Tyler Hyatt



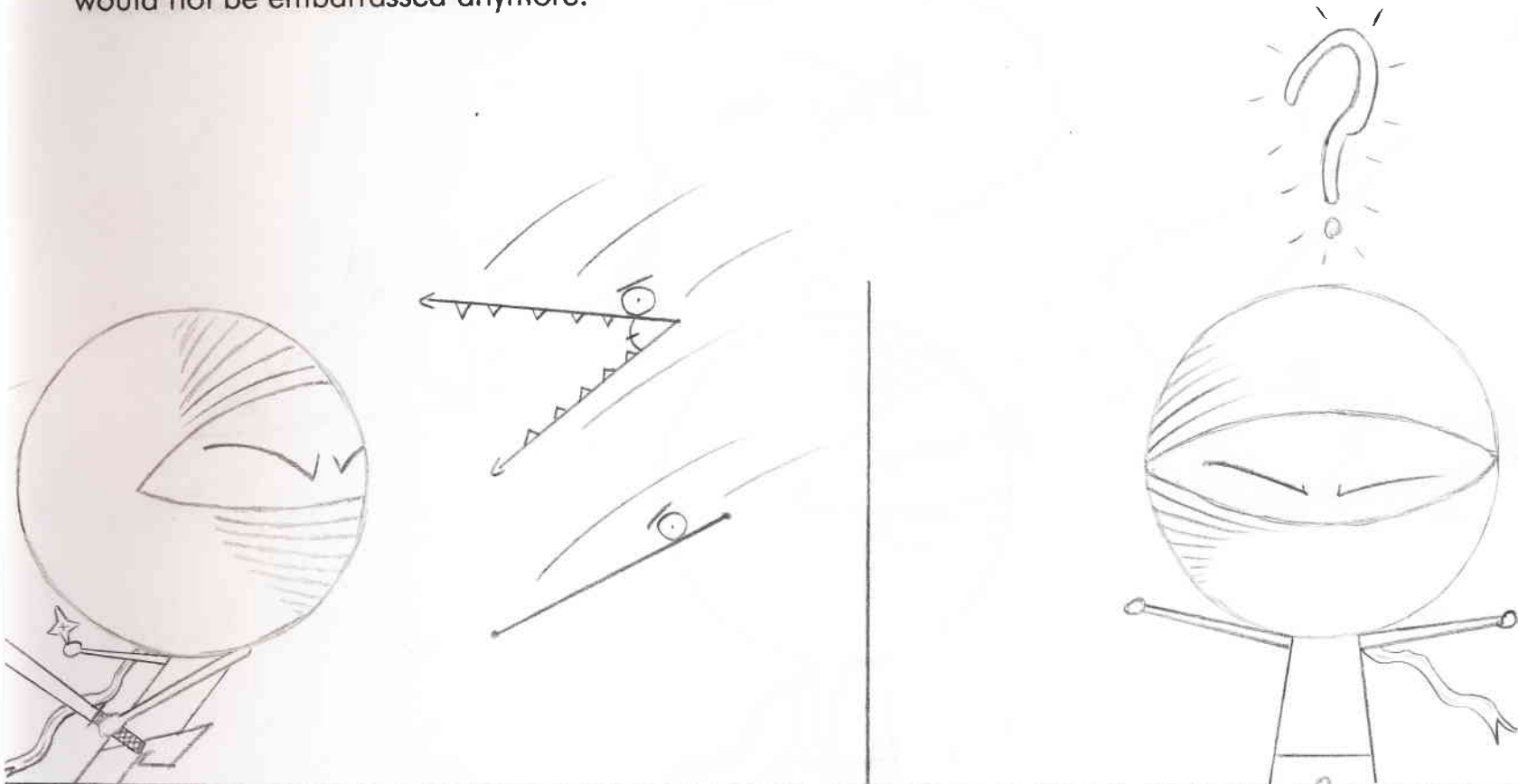
Once upon a time, there lived a little ninja named Ninja. He lived in the Land of Circles, which was a beautiful land filled with dragons and such. But Ninja had a problem. His pet dragon, Juan, was square, not circular. Every day as he walked through the streets of his hood, people looked and stared.



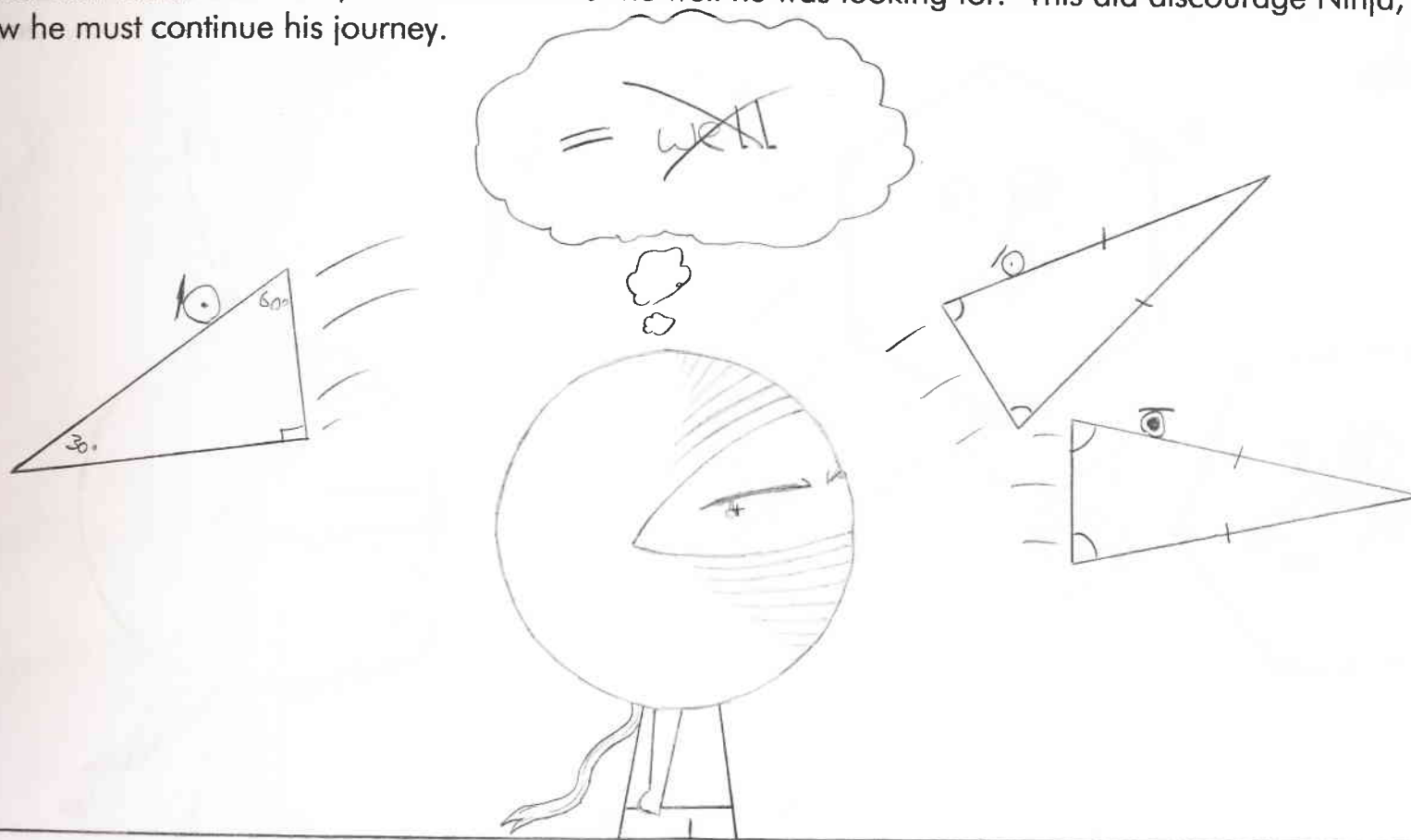
Ninja decided that he was going to take Juan on a journey to find a magical well that could hopefully make him circular. So Ninja packed some supplies and began his journey for the Lost Well of Circumference.



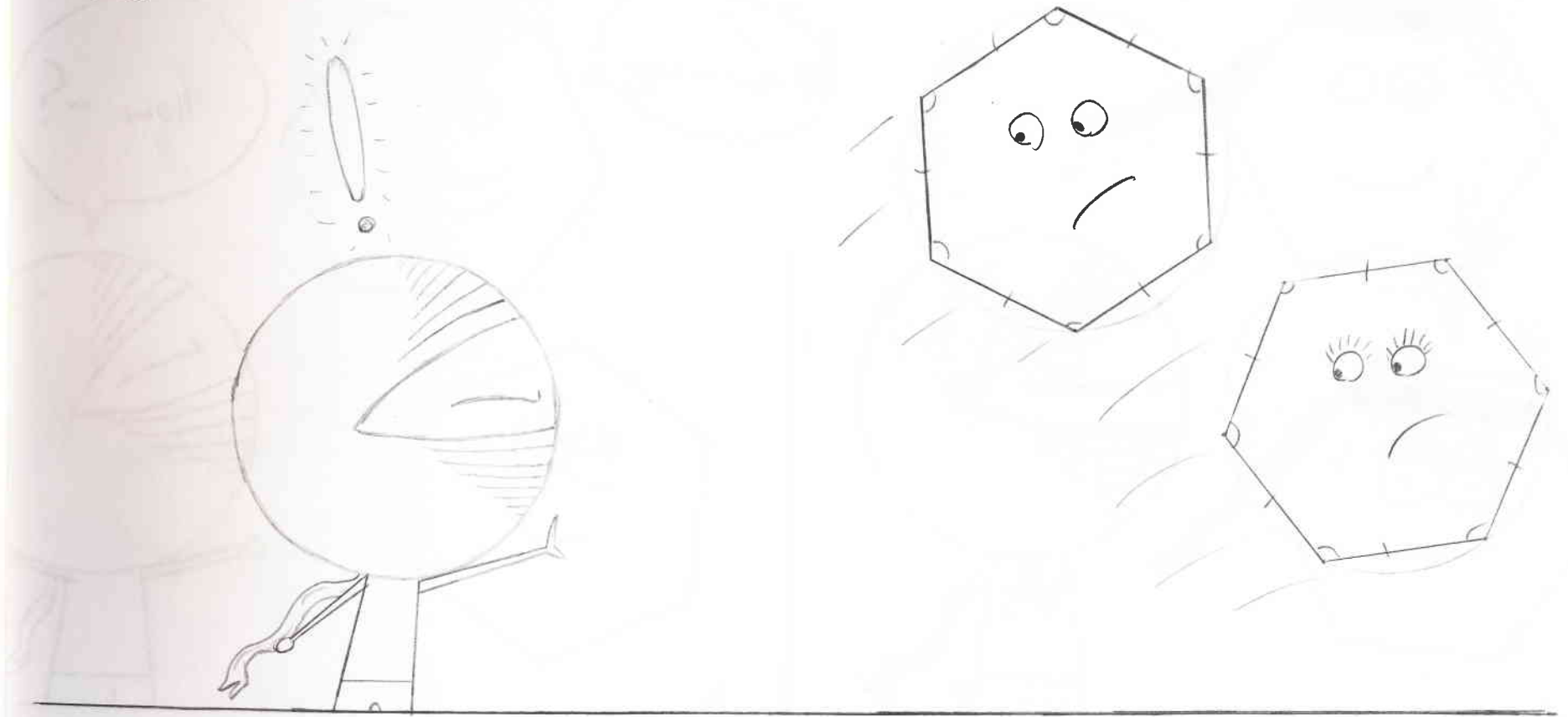
Ninja began his journey in the Land of All Things Geometry. And even though he fought many segments and angles, he could not find the Lost Well of Circumference. He decided that he must keep searching, for he would not be embarrassed anymore.



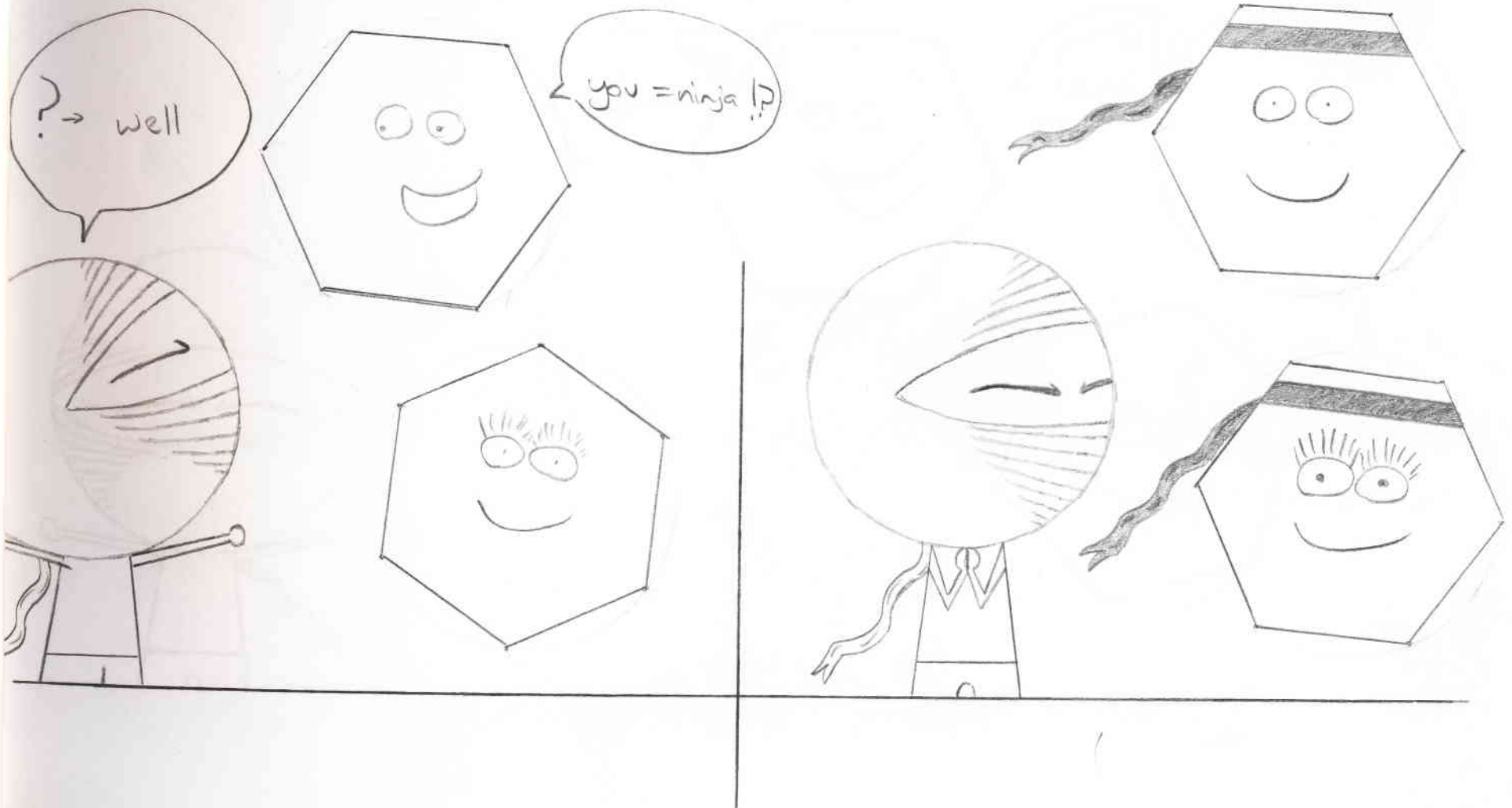
As he walked through the magical door of Dimension Three, he saw so many triangles flying around. Some of them were congruent, or equal, some of them were isosceles, and some of them were right. But still no matter how hard he looked, he could not find the well he was looking for. This did discourage Ninja, but he knew he must continue his journey.



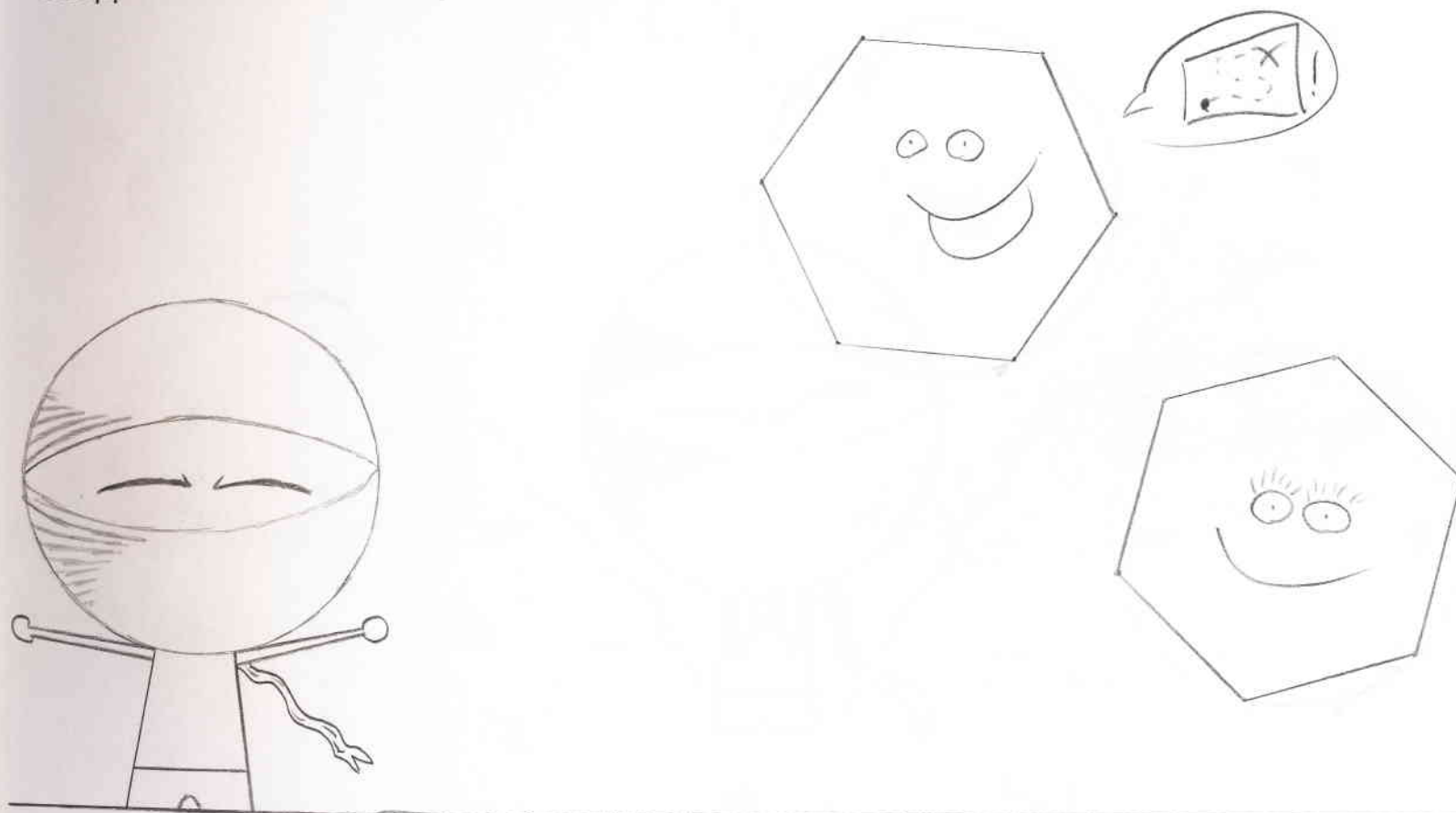
As Ninja walked through the portal to the next world, he realized that he had stepped into the World of Polygons and Shapes. He knew that he would not find the Lost Well of Circumference there, so he stopped and asked for directions. He stopped the nearest pair of regular polygons which were a pair of regular hexagons.



He said to them, "Mr. and Mrs. Hexagon, I was wondering if you knew..." but before he could finish, they interrupted him and said, "Wait! Are you a ninja? We have always wanted to be ninjas! We will answer your question if you teach us how to become ninjas." So Ninja began to teach them.



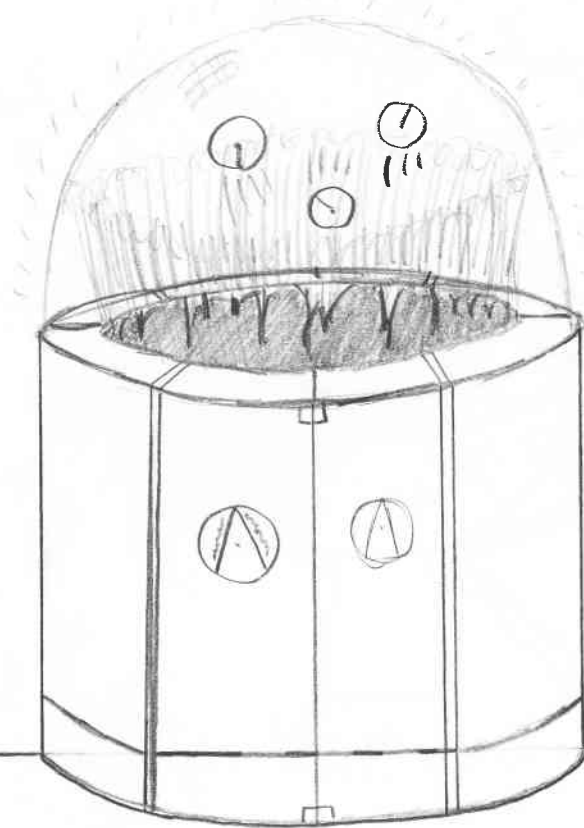
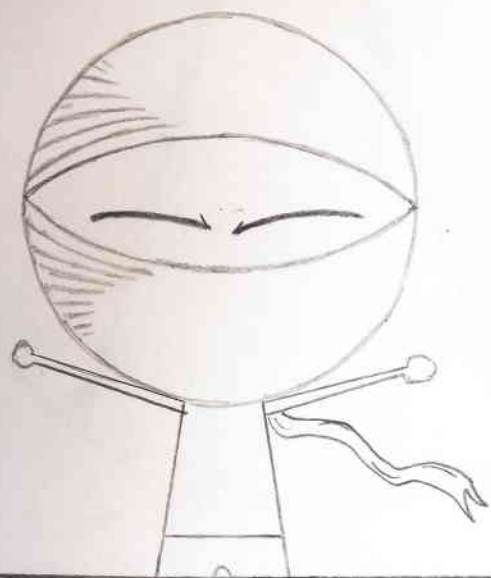
After they had become ninjas themselves, Ninja asked, "Now, will you tell where I am to go if I want to find the Lost Well of Circumference?" They answered, "We know exactly where you need to go. You must go to the Land of Circles to find this well. We hope this was enough information for you!" And with that, they disappeared into thin rectangular air.



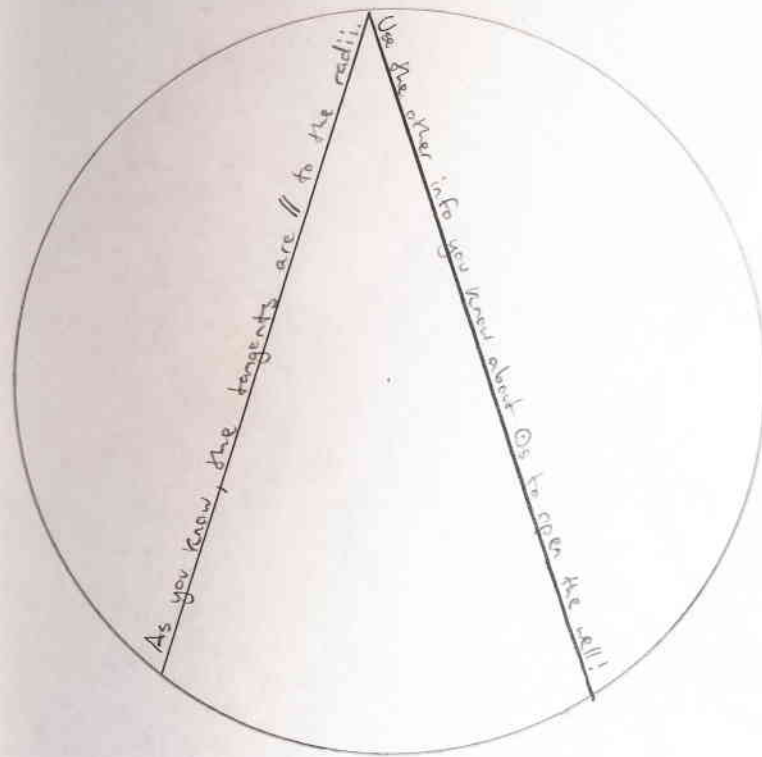
Ninja was utterly confused, for he was originally from the Land of Circles. "Maybe I should have started looking there before I went on this long journey." So he went back through the portals until he reached his homeland, the magical Land of Circles.



"Behold!!!" he said. "The magical well was in my back yard the whole time!" So Ninja and Juan walked up to the well and looked inside. What they saw was an unending number of circles. Magical radii were jumping out of the water like flying fish! But there was some kind of force field covering the opening of the well. This was a problem for Ninja.



He saw that there was an inscribed angle with words along its rays that read, "As you should know, the tangents are perpendicular to the radii. Use the other information that you know about circles to find the secret code to open the well." This confused Ninja, but not for long. He found out that the most important part of a circle was its circumference. Thinking quickly, he wrote $\pi \times \text{Diameter}$, and the well magically opened up.



Ninja and Juan were overjoyed. Quickly, Juan jumped into the well and then came back out. At last, he was circular! Juan and Ninja were so happy, they went back to Ninja's dojo temple and had some green tea, and they both lived happily ever after.

